

## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION 10

1200 Sixth Avenue, Suite 900 Seattle, Washington 98101-3140

November 20, 2008

NOV 2 4 2008

NORTHWEST SECTOR

Dana Bayuk Oregon Department of Environmental Quality Northwest Region 2020 Southwest 4<sup>th</sup> Avenue Portland, Oregon 97201

Re: Siltronic Corporation Revised Enhanced In-Situ Bioremediation Source Control Work Plan (October 20, 2008); Portland Harbor Superfund Site, Portland, Oregon

Dear Mr. Bayuk:

The U.S. Environmental Protection Agency (EPA) has reviewed the above referenced document for the Siltronic Corporation site in Portland, Oregon. Overall, EPA considers the document presents the information well and believes that the data in the plots makes sense and that the logs provided in this document contain adequate detail. Based on the information provided in this document, EPA provides the following comments for Oregon Department of Environmental Quality (DEQ) to consider in proceeding forward with its decisions regarding upland source control at this site.

First, EPA believes a number of additional monitoring wells need to be installed near the shoreline to determine the far-field effects of the enhanced *in-situ* bioremediation (EIB) injection in the source area. From the pilot study, one well (WS-21-112) that was placed close to the injection was used to show degradation of product. While EPA agrees that this was adequate for the pilot study, the monitoring for the full-scale EIB injection should be located further away from the injection site. Further, multiple monitoring wells are needed to determine the degradation of the source material throughout the plume.

Second, EPA believes that additional characterization and control of the new source area discussed in Section 3.1.5 should be addressed in future design documents.

Finally, EPA is not familiar with the dense nonaqueous phase liquid (DNAPL) funnels that are discussed in the document and would like to have more information regarding this technology.

In closing, EPA considers this project worth ensuing and encourages DEQ to proceed with design and implementation of this source control measure. If you have any questions or would like to discuss the contents of this letter further, please contact me at (206) 553-6705, or by email at koch.kristine@epa.gov.

Sincerely,

Aristine Koch

Remedial Project Manager Portland Harbor Superfund Site

cc: Mr. Tom McCue Siltronic Corporation

> Mr. James Peale Maul Foster & Alongi, Inc.

Mr. James Anderson Oregon DEQ

Mr. Chip Humphrey USEPA

Mr. Eric Blischke USEPA

Ms. Lori Houck Cora USEPA